

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of:

Lopatin, et al.

Serial No.: 10/626,371

Filing Date: July 23, 2003

**For: Semiconductor Device Having Copper
Lines with Reduced Electromigration Using an
Electroplated Interim Copper-Zinc Alloy Thin
Film on a Copper Surface**

Art Unit: Unknown

Examiner: Unknown

Customer Number 25700

Customer Number
Bar Code Label:



25700

PATENT TRADEMARK OFFICE

REVOCATION AND POWER OF ATTORNEY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir/Madam:

Applicants of the above-identified patent application hereby revoke all previous powers of attorney given in this application and appoint Michael Farjami, Reg. No. 38,135; Farshad Farjami, Reg. No. 41,014; Elizabeth A. Apperley, Reg. No. 36,428; Bradley Botsch, Reg. No. 34,552; Paul S. Drake, Reg. No. 33,491; Daniel R. Collopy, Reg. No. 33,667; Michael Caywood, Reg. No. 37,797; Kent Cooper, Reg. No. 37,296; Harry A. Wolin, Reg. No. 32,638; and Keith Witek, Reg. No. 37,475, all attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments thereto, to receive communications from the Patent and Trademark Office and to transact all business in the Patent and Trademark Office connected therewith.

Please direct all communications to:

Michael Farjami, Esq.
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16148 Sand Canyon
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PATENT TRADEMARK OFFICE

Advanced Micro Devices, Inc., a Delaware corporation, certifies that it is the assignee of the entire right, title, and interest in the patent application identified above by virtue of an assignment from the inventor(s) of the patent application identified above. The assignment was recorded at the Patent and Trademark Office at Reel 012649, Frame 0001, or for which a copy thereof is attached. The undersigned, whose title is supplied below, is authorized to act on behalf of assignee (37 CFR §3.73(b)).

Signed this 17 day of November 2003

(Signature)

On behalf of Advanced Micro Devices, Inc.

Paul S. Drake, Esq., Reg. No. 33,491
(Print Name)

Intellectual Property Portfolio Counsel and Assistant Secretary
(Title)

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on:

11/20/03
Date of Deposit

Signature of Person Mailing Paper and/or Fee

Sukhrie Bal
Typed or Printed Name of Person Mailing Paper and/or Fee

ASSIGNMENT AGREEMENT

FOR good and valuable consideration, receipt of which is hereby acknowledged, **SERGEY LOPATIN**, of Santa Clara, California, and **ALEXANDER H. NICKEL**, of Mountain View, California, hereinafter **ASSIGNORS**, do hereby sell, assign, and transfer unto **ADVANCED MICRO DEVICES, INC.**, doing business at One AMD Place, M/S 68, P.O. Box 3453, Sunnyvale, California 94088, hereinafter **ASSIGNEE**, its successors and assignees, the entire title, interest and right, including the right of priority, in an application for Letters Patent of the United States, entitled **METHOD OF REDUCING ELECTROMIGRATION IN A COPPER LINE BY ELECTROPLATING AN INTERIM COPPER-ZINC ALLOY THIN FILM ON A COPPER SURFACE AND A SEMICONDUCTOR DEVICE THEREBY FORMED**, filed herewith, and the inventions and any of them therein set forth and described, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefor, and any and all provisional, divisional, reissue, continuation, substitute, or renewal applications thereof which have been or shall be filed in the United States and any and all equivalents thereto in any and all foreign countries;

And for the above consideration **ASSIGNORS** covenant to assign to **ASSIGNEE**, under identical terms herein, any and all improvements which have been or shall be developed by **ASSIGNORS** regarding subject matter herein;

And for the above consideration **ASSIGNORS** agree promptly upon request of the **ASSIGNEE**, its successors and assignees, to execute and deliver without further compensation any power of attorney, assignment, application (whether original, continuation, renewal, substitute, divisional, or reissue) or other papers which may be necessary or desirable fully to secure to **ASSIGNEE**, its successors and assignees, the inventions and any of them described in said application and patent rights therein, in the United States and in any country foreign thereto, and to cooperate and assist in the prosecution of appeal and interference proceedings involving said inventions and/or in the adjudication or re-examination of said Letters Patent, provided that the expenses which may be incurred by **ASSIGNORS** in lending such cooperation and assistance be paid by **ASSIGNEE**; and

ASSIGNORS covenant that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by ASSIGNORS, and that full right to convey the same as herein expressed is possessed by ASSIGNORS.

This agreement constitutes the entire agreement of the parties and supersedes and cancels any and all prior and/or contemporaneous utterances, statements, representation, understandings and/or agreements whether oral and/or written in connection with this agreement.

IN WITNESS WHEREOF, ASSIGNORS agree to the above-mentioned terms and conditions as below evidenced by their signatures:

2/12/2002
Date

Sergey Lopatin
SERGEY LOPATIN

2/12/02
Date

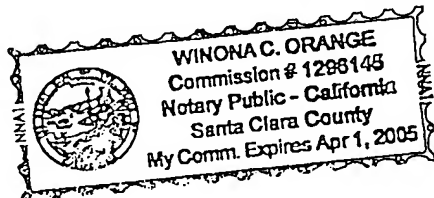
Alex H. Nickel
ALEXANDER H. NICKEL

STATE OF CALIFORNIA]
COUNTY OF Santa Clara]

On 02-12-02 ~~2002~~, before me, WINONA C. ORANGE,
personally appeared SERGEY LOPATIN,

~~personally known to me~~
OR ~~proved to me on the basis of satisfactory evidence~~ to be the person whose
name is subscribed to the within instrument and acknowledged to me that ~~(s)he~~ executed the
same in ~~(his/her)~~ authorized capacity, and that by ~~(his/her)~~ signature on the instrument the
person or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.



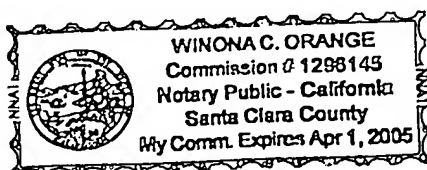
Winona C. Orange
Notary Public

STATE OF CALIFORNIA]
COUNTY OF Santa Clara]

On 02-12-02 ~~2002~~, before me, WINONA C. ORANGE, Notary Public,
personally appeared ALEXANDER H. NICKEL,

~~personally known to me~~
OR ~~proved to me on the basis of satisfactory evidence~~ to be the person whose
name is subscribed to the within instrument and acknowledged to me that ~~(s)he~~ executed the
same in ~~(his/her)~~ authorized capacity, and that by ~~(his/her)~~ signature on the instrument the
person or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.



Winona C. Orange
Notary Public